

the presence there of the new species, connecting the colonies in adjoining states.

Specimens representing the new finds have been deposited in the U. S. National Herbarium. The distribution of *Silene Wherryi* can now be summarized as follows:

On thinly wooded rocky or gravelly slopes, in neutral to moderately acid soils, in the inner part of the Coastal Plain and in various other physiographic provinces, Alabama to central Missouri, northern Kentucky, and western North Carolina.

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### Notes on the Distribution of *Dionaea*

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In the July number of the Journal of the Elisha Mitchell Scientific Society (43: 221-228, pl. 33) Dr. W. C. Coker discusses the distribution of *Dionaea muscipula* (Venus's fly-trap), and shows the known localities (in about 14 counties in North Carolina and two in South Carolina) on a map. He also mentions several unverified and presumably erroneous reports of its occurrence outside of its present known range. To the list of unverified stations should be added one much more remote than any mentioned by Dr. Coker.

Philip Henry Gosse, an English naturalist (father of Edmund Gosse, the poet), spent the greater part of the year 1839(?) teaching at Pleasant Hill, Alabama, which is in the eastern edge of Dallas County, and near the southern edge of the black belt, the most fertile region in the state. After returning to England he published a small illustrated volume of 318 pages, entitled "Letters from Alabama, (U. S.) chiefly relating to natural history" (London, 1859), containing observations on plants, animals and people that he saw, in the form of a diary. On page 192, under date of July 5, he mentions *Dionaea*, and describes it in such a way as to show that he did not mistake a *Drosera* or *Sarracenia* for it (as some of the writers quoted by Dr. Coker may have done).

The average reader would naturally infer from this that he found the plant growing in the neighborhood; but he gives no locality or habitat for it, and he may have seen it cultivated in England and described it from memory, or even copied a

description from some book. For its occurrence in the most fertile region of Alabama, and so far from all known stations, seems extremely improbable. I have been in that neighborhood several times, and have not seen even a *Sarracenia* within 35 miles of the place,<sup>1</sup> though it is barely possible that some *Drosera* could be found in a boggy spot on one of the gravelly hillsides which are seen in a few places in that part of the black belt.

Dr. Coker in his paper does not indicate the habitat of *Dionaea*, except in quotations from previous writers, or suggest any environmental factor which might be responsible for giving it (and several other plants) such a restricted range. Although I have been in nearly every county in which it is known to grow, I never happened to find it; but I understand that its habitat is savannas or wet pine-barrens, like several species of *Sarracenia*.

In 1907 (Torreya 7:43; Science II, 25:540; Bull. Torrey Club 34:365), after making my first visit to Wilmington the previous summer, I observed that *Dionaea* is one of about half a dozen species of plants found only within about 100 miles of the mouth of the Cape Fear River, and there is a still larger number of species, mostly pine-barren bog plants, which are more abundant in that neighborhood than at twice that distance, though most of them reappear in Georgia. I offered no reasonable explanation at the time, but about three years later (Bull. Torrey Bot. Club 37:415-418) I pointed out that the Cape Fear pine-barren region (mapped on pages 407 and 592 of the same volume) had less than one-thousandth of its area cultivated in cotton in 1880, and was characterized by having a larger proportion of its rainfall in summer than surrounding regions; which seems a sufficient explanation of the variety and abundance of bog plants there. (The Alabama locality mentioned above has a very different type of rainfall, with rather dry summers.)

An amendment to this observation can now be made by taking advantage of a later climatological discovery; namely, that the principal pine-barren regions not only have abundant rain in summer (which is true also of the upper Mississippi valley, which has much more fertile soil and very different vegetation), but (quite unlike the upper Mississippi valley)

<sup>1</sup> See Torreya 22:57-60. 1922.

have more rain in late summer than in early summer.<sup>2</sup> Wilmington has about four inches more rain in August–September, than in April–June.

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### **Talinum rugospermum**

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This plant was first described in the Asa Gray Bulletin of December 1899. An error in the description and in the drawings makes it desirable to describe it again and include the corrections.

Although in reach of the type station all these years, I had not had an opportunity of visiting it till July of the present year. It was collected on the sand dunes of Trempealeau Bay, Wis. on the farm of Richard Gillis. The recent collection showed this species to be perennial,—the first description gave it as annual. This error was due to the fact that the description was made from seedlings raised in my garden, which bloomed the first year.

Further, the printer made the seeds of the two species look alike, though the description stated the facts correctly: the seed of the Wisconsin species is rugose, that of *Talinum teretifolium* is smooth and shiny.

Two points were not adequately emphasized: the Wisconsin plant grows in sandy soil, and has no corm; the eastern plant grows on rock, and generally has a corm. Otherwise the two plants look very much alike.

Following is a corrected and more complete description of *Talinum rugospermum*.

Stem cylindrical, fleshy, perennial, one or more inches long, forming short branches on the older plants; leaves crowded near the top of the stem or branchlets, 1 to 2 inches long, terete, fleshy; inflorescence on a peduncle, 4 to 6 inches long, slender, cymose, the bracts small, about 1/12 inch long, narrowly triangular, prolonged below the point of attachment into a semicircular lobe; sepals 2, early deciduous; flowers when open  $\frac{1}{2}$  inch in diameter, light pink, petals ovate, opening but once,

<sup>2</sup> See Science II. 48:208–211. Aug. 30, 1918. For a map showing the line of equilibrium between early and late summer rain, and the approximate proportion of evergreens in the forests of the United States, see Engineering & Mining Journal, 112:693. Oct. 29, 1921. Also Literary Digest a few weeks later.